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March 1, 2006

Docket Control
Arizona Corporation Commission
1200 West Washington
Phoenix, AZ 85007

RE: DOCKET NUMBER E-01345A-03-0437
DECISION NUMBER 67744

Dear Madam or Sir,

Pursuant to Arizona Corporation Commission Decision Number 67744, provided is the Semi-Annual report covering the period of July 1 through December 31, 2005.

If you or your staff have any questions, please contact Angie Krainik at 602/250-2611.

Sincerely,

Justin H. Thompson
Manager
Regulation, Policy and Analysis

JHT/AKK

CC: Brian Bozzo
13 copies for Docket

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DSM SEMI-ANNUAL PROGRESS REPORT FOR THE PERIOD: JULY THROUGH DECEMBER 2005

This progress report includes the following information for the existing approved Low Income Energy Wise Assistance, Market Transformation, and Residential Consumer Products programs, as well as proposed DSM programs, as specified in Decision No. 67744:

- A brief description of the program.
- Program modifications.
- Program goals, objectives, and savings targets.
- Programs terminated.
- The levels of participation.
- A description of evaluation and monitoring activities and results.
- kW and kWh savings.
- Benefits and net benefits, both in dollars, as well as performance incentive calculation.
- Problems encountered and proposed solutions.
- Costs incurred during the reporting period disaggregated by type of cost, such as administrative costs, rebates, and monitoring costs.
- Findings from all research projects.
- Other significant information.

Summary pages detailing the program expenses and DSM Electric Savings Benefits are provided in Tables 1 and 2. The Performance Incentive Calculation is shown in Table 3. Cumulative program expenses for January – December 2005 are shown in Table 4.

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DSM SEMI-ANNUAL PROGRESS REPORT FOR THE PERIOD: JULY THROUGH DECEMBER 2005

Table 1
DSM Program Expenses

ACC Program	Rebates & Incentives	Training & Technical Assistance	Consumer Education	Program Implement	Program Marketing	Planning & Admin	*Program Total Cost
Residential							
Low Income	\$277,337	\$10,000	\$1,474	\$27,324	-	\$45,592	\$361,727
Res Existing HVAC	-	\$18,169	\$31,970	\$67,037	-	\$26,267	\$143,443
Res New Const	\$4,538	\$41,299	\$3,568	\$17,089	\$46,251	\$20,267	\$133,012
Consumer Products	\$399,864	-	\$4,979	\$289,559	\$43,425	\$41,548	\$779,375
Totals for Residential	\$681,739	\$69,468	\$41,991	\$401,009	\$89,676	\$133,674	\$1,417,557
Non-Residential							
Large Non Res Existing	-	-	-	-	-	\$75,534	\$75,534
Large Non Res New Const	-	-	-	-	-	\$86,117	\$86,117
Small Business	-	-	-	-	-	\$39,539	\$39,539
Bldg Operator Training	-	-	-	-	-	-	-
Energy Information Svcs	-	-	-	-	-	-	-
Schools	-	-	-	-	-	\$21,718	\$21,718
Total for Non-Residential	-	-	-	-	-	\$222,908	\$222,908
Segment Totals	\$681,739	\$69,468	\$41,991	\$401,009	\$89,676	\$356,582	\$1,640,465
							Program Costs
							\$1,640,465
							Meas, Eval, & Research (MER)
							\$222,009
							Performance Incentive
							\$394,806

Definitions

Rebates & Incentives - Includes dollars that go toward customer rebates and incentives, installation of low income weatherization and low income bill assistance.

Training & Technical Assistance - Includes all dollars that are used for energy efficiency training and technical assistance.

Consumer Education - Includes dollars that are used to support general consumer education about energy-efficient improvements.

Program Implementation - Program delivery costs associated with implementing the program - includes implementation contractor labor and overhead costs, as well as other direct program delivery costs.

Program Marketing - Includes all expenses related to marketing the program and increasing DSM consumer awareness (direct program marketing costs as opposed to general consumer education).

Planning and Administration - APS costs to plan, develop and administer programs-includes management of program budgets, oversight of the RFP process and implementation contractor, program development, program coordination and general overhead expenses.

Measurement, Evaluation, & Research (MER) - MER budget includes funding for some baseline studies to determine current practices, stock, and efficiency levels.

Performance Incentive - Share (%) of DSM net economic benefits (benefits minus cost), capped at 10% of total DSM expenditures, inclusive of the performance incentive.

*Includes costs for existing approved programs as well as planning costs for proposed DSM portfolio plan and programs. All expenses other than Planning & Admin are for pre-approved programs. The Performance Incentive is calculated in Table 3 and pending ACC approval.

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Table 2
DSM Electric Savings Benefits

	Capacity Savings MW	Lifetime ¹ MWh Savings	Program Cost	Societal Benefits	Societal Costs	Net Benefits
Residential						
Consumer Products	3.35	129,664	\$779,375	\$7,268,139	\$1,829,716	\$5,438,423
Existing Home HVAC ²	-	-	\$143,443	-	\$143,443	\$(143,443)
New Construction ²	-	-	\$133,012	-	\$133,012	\$(133,012)
Low Income ³	.075	500	\$361,727	\$268,619	\$289,967	\$(21,348)
Totals for Residential	3.43	130,164	\$1,417,557	\$7,536,758	\$2,396,138	\$5,140,620
Non-Residential						
Existing Facilities Large	-	-	\$75,534	-	\$75,534	\$(75,534)
Small Non-Residential	-	-	\$39,539	-	\$39,539	\$(39,539)
New Construction	-	-	\$86,117	-	\$86,117	\$(86,117)
Building Operator Training	-	-	-	-	-	-
Energy Information System	-	-	-	-	-	-
Schools	-	-	\$21,718	-	\$21,718	\$(21,718)
Totals for Non-Residential	-	-	\$222,908	-	\$222,908	\$(222,908)
Measurement, Evaluation & Research	-	-	\$222,009	-	\$222,009	\$(222,009)
Performance Incentive ⁴	-	-	\$394,806	-	\$394,806	\$(394,806)

1 Refers to savings over the expected lifetime of all program measures.

2 As part of the current market transformation effort, kW and kWh savings are not quantified.

3 Program Costs include weatherization and bill assistance. Societal Costs do not include bill assistance because it does not contribute to electric savings.

4 As calculated in Table 3.

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DSM SEMI-ANNUAL PROGRESS REPORT FOR THE PERIOD: JULY THROUGH DECEMBER 2005

Table 3
Performance Incentive Calculation

	July 1 – Dec 2005	Program to Date	
	Net Benefit	Net Benefit	10% Share
Residential			
Consumer Products	\$5,438,423	\$5,409,270	\$540,927
Existing Home HVAC	\$(143,443)	\$(524,886)	\$(52,489)
New Construction	\$(133,012)	\$(343,089)	\$(34,309)
Non-Residential			
Existing Large	\$(75,534)	\$(114,109)	\$(11,411)
Existing Small	\$(39,539)	\$(65,294)	\$(6,529)
New Construction	\$(86,117)	\$(128,316)	\$(12,832)
Building Operator Training	-	\$(5,824)	\$(582)
Energy Information System	-	\$(5,878)	\$(588)
Schools	\$(21,718)	\$(36,853)	\$(3,685)
Measurement, Evaluation & Research	\$(222,009)	\$(236,965)	\$(23,696)

This calculation does not include the Low Income Program. This program has a negative net benefit and APS should not be penalized for performing well on this program. The net benefits for the Low Income Program for this reporting period as shown in Table 2 are \$(21,348).

Maximum performance incentive allowed is 10% of the spending level as ordered in Decision #67744. This is \$4.8 million over the three-year period. Approval of the incentive calculation is pending ACC approval.

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DSM SEMI-ANNUAL PROGRESS REPORT FOR THE PERIOD: JULY THROUGH DECEMBER 2005

PROGRAM: LOW INCOME ENERGY WISE ASSISTANCE

Description

APS' Energy Wise Low Income Assistance Program is designed to improve the energy efficiency, safety and health attributes of homes for customers whose income falls within the defined federal poverty guidelines. This program serves low income customers with various home improvements including cooling system repair and replacement, insulation, sunscreens, water heaters, window repairs and improvements as well as other general repairs. In addition, low income families are provided crisis bill assistance. The program is administered through various community action agencies throughout APS' service territory.

Program Modifications

Modifications were proposed to the Arizona Corporation Commission on June 3, 2005. The proposal would expand this program by opening it to rented homes, increase the allowed expenditure per home, allow the replacement of certain lights with compact fluorescent lamps (CFL), allow the replacement of certain refrigerators with energy-efficient models, and increase the total budget to \$1,100,000 per year. In addition, a portion of the total budget will be earmarked for Native American customers living on tribal lands.

Program Goals, Objectives, and Savings Targets

- To improve the energy efficiency of homes for customers whose income falls within the defined poverty guidelines.
- To provide customers information on energy management and conservation.
- To provide assistance in paying the electric bill for qualified customers in crisis situations.

Programs Terminated

No programs were terminated during the second half of 2005.

Levels of Participation

A total of 555 households received assistance during the reporting period, July through December 2005. Please note that a single household may have received more than one type of assistance.

Type of Assistance	Number of Households
Bill Assistance	327
Health and Safety	14
Repair and Replace	63
Weatherization	218

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Evaluation and Monitoring Activities and Results

Weatherization measures must pass the cost effectiveness test that is detailed in the federal government's Weatherization Assistance Program (WAP) rules. These rules allow certain prescriptive measures which vary with the climate zone and type of housing construction. Measures not on the prescriptive list must be assessed by a computer analysis to determine the economic feasibility.

The Department of Commerce Energy Office with information from APS, is analyzing the electric energy used in weatherized homes before and after the weatherization measures are implemented. It takes a year of data before the weatherization and another year of data after the weatherization to get an accurate gauge of the impact of the measures. As the data base grows over time a more accurate picture of the impact of the weatherization activities will emerge.

Additionally, during the reporting period, APS filed for and received approval from the ACC, to proceed with a DSM baseline and market potential study. As part of the study, information will be gathered related to low income households and their awareness of energy efficiency.

kW and kWh Savings

Of the 555 households participating in the program, a total of 228 homes received weatherization and/or repair & replace services that contributed to the energy savings.

Savings		
Homes	kW	kWh
228	68.4	455,544
Line loss savings	6.7	44,643
Total savings	75.1	500,187

The kW and kWh factors are based on data from the Department of Commerce Energy Office study of 150 weatherized homes. The homes were located in four different climate zones throughout the state and were representative of low income homes receiving weatherization assistance. Most homes received funding from multiple sources. The measures evaluated include duct sealing, infiltration remediation, attic insulation, shade screens and HVAC equipment replacement. The average cost per home was \$1,815.

The study normalized electric and gas savings into dollars with gas savings being about 10% of the total. The present value of the dollar savings was converted to "equivalent kWh" at 8 cents per kWh.

The annual energy and demand savings per home in this study are estimated to be 1,998 "equivalent kWh" and 0.3 kW.

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DSM SEMI-ANNUAL PROGRESS REPORT FOR THE PERIOD: JULY THROUGH DECEMBER 2005

Benefits and Net Benefits/Performance Incentive Calculation

The benefits and net benefits are provided in Table 2. The details for the performance Incentive calculation are provided in Table 3.

Problems Encountered and Proposed Solutions

No problems were encountered during this reporting period.

Costs Incurred

Costs incurred for this program during the second half of 2005 are listed below:

Activity	Rebates & Incentives	Training & Technical Assistance	Consumer Education	Program Implement	Program Marketing	Planning & Admin	Program Total Cost
Bill Assistance	\$71,760	-	-	-	-	-	\$71,760
Health & Safety	\$5,434	-	-	-	-	-	\$5,434
Repair and Replace	\$14,477	-	-	-	-	-	\$14,477
Weatherization	\$ 185,667	\$10,000	\$1,474	-	-	-	\$ 197,141
3rd Party Manager Arizona Community Action Association	-	-	-	\$20,838	-	-	\$20,838
APS Program Support	-	-	-	\$6,486	-	\$45,592	\$52,077

Findings From All Research Projects

No research projects were undertaken.

Other Significant Information

No other significant information to report.

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DSM SEMI-ANNUAL PROGRESS REPORT FOR THE PERIOD: JULY THROUGH DECEMBER 2005

PROGRAM: RESIDENTIAL EXISTING HOMES HVAC

Description

The residential existing home HVAC program promotes energy-efficient equipment and proper installation and maintenance of residential heating and air conditioning systems. The program provides training and technical assistance for HVAC contractors and education for consumers about the benefits of energy-efficient heating and cooling systems. Through the APS Qualified Contractor program, APS provides customer referrals to contractors who meet strict program requirements for professional standards, technician training and customer satisfaction.

Program Modifications

On July 1, 2005 APS filed a DSM Program Portfolio Plan with the Arizona Corporation Commission which includes 10 proposed programs, including an expanded and modified residential HVAC program. The proposed HVAC program design builds on the existing APS Qualified Contractor program, and offers financial incentives to encourage upgrades to quality-installed high-efficiency equipment (≥ 14 SEER/12 EER) that meets US EPA/DOE Energy Star® energy-efficiency standards. Incentives are also proposed for home performance testing and repairs (such as sealing duct leaks) to improve energy efficiency. At this time, APS is still awaiting ACC approval for the expanded and modified residential HVAC program.

Program Goals, Objectives and Savings Targets

The current program is a market transformation effort with long term goals to improve the market for energy-efficient HVAC systems by reducing market barriers to adoption of greater efficiency levels. For HVAC contractors, the program provides training and technical assistance to help contractors sell energy efficiency and deliver quality installation and repairs. For consumers, APS provides education to help customers better understand how to improve the energy efficiency of their home's heating and cooling system.

The proposed program modification filed on July 1, 2005 includes revised program objectives and estimated savings.

Programs Terminated

No programs were terminated during the second half of 2005.

Levels of Participation

In the second half of 2005:

- There are currently 55 contractors participating in the APS Qualified Contractor program. According to Arizona Heat Pump Council estimates, participating contractors make more than 150,000 household visits annually within the APS service territory.
- Approximately 285 HVAC technicians participated in APS sponsored training courses in order to meet APS Qualified Contractor program training requirements.
- APS provided over 1,070 referrals to customers seeking HVAC service, repair or replacement of their home HVAC system.

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- APS distributed more than 1,000 copies of the Consumer's Guide to an Energy Efficient AC System.
- APS distributed two issues of the Southwestern Home Journal with a total reach of more than 250,000 customers. The Journals included articles about home energy efficiency, including the benefits of AC system maintenance and why it is important to select a qualified professional contractor.
- There were more than 5,600 unique user visits to the APS Energy Survey home energy audit at aps.com.

Evaluation and Monitoring Activities and Results

In the first half of 2005, APS filed for approval to proceed with a DSM baseline and market potential study. The study was approved by the ACC in Decision No. 67816. As part of this research, the study will document the current state of the market for residential HVAC systems, level of energy-efficiency awareness among consumers and trade allies, typical SEER levels of replacement equipment, and current installation practices. This research is currently underway. Final results are anticipated by the end of the first quarter of 2006.

kW and kWh Savings

As part of the current market transformation effort, kW and kWh savings are not quantified. The program plan that APS filed on July 1, 2005 includes estimated savings for the proposed program.

Benefits and Net Benefits/Performance Incentive Calculation

As part of the current market transformation effort, program benefits and net benefits are not currently quantified and performance incentives are not calculated. The program plan that APS filed on July 1, 2005 includes estimates of program benefits/net benefits and calculates estimated program performance incentives.

Problems Encountered and Proposed Solutions

No problems were encountered during this reporting period.

Costs Incurred

Costs incurred for this program during the second half of 2005 are listed below:

ACC Program	Rebates & Incentives	Training & Technical Assistance	Consumer Education	Program Implement	Program Marketing	Planning & Admin	Program Total Cost
Res Existing HVAC	-	\$18,169	\$31,970	\$67,037	-	\$26,267	\$143,443

Findings from all Research Projects

No research projects were undertaken.

Other Significant Information

No other significant information to report.

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DSM SEMI-ANNUAL PROGRESS REPORT FOR THE PERIOD: JULY THROUGH DECEMBER 2005

PROGRAM: RESIDENTIAL NEW HOME CONSTRUCTION

Description

This program promotes high efficiency construction practices for new homes. The program emphasizes the whole building approach to improving energy efficiency and includes field testing of homes to ensure performance. Participating builders are trained to apply building science principles to assure that high-efficiency homes also have superior comfort and performance. The program also provides education for prospective homebuyers about the benefits of choosing an energy-efficient home and the features to consider.

Program Modifications

On July 1, 2005 APS filed a DSM Program Portfolio Plan with the Arizona Corporation Commission which includes 10 proposed programs, including an expanded and modified residential new construction program. The proposed program design builds on the existing APS Performance Built Homes program. To encourage builders to meet program energy efficiency standards, APS proposes to provide financial incentives to builders of \$400 per home (this represents approximately 50% of a builder's incremental cost for building to program standards). In addition, EPA/DOE Energy Star® home efficiency levels are set to increase in June, 2006. This program will be based on the new more stringent Energy Star® standard. The program will encourage builders to exceed Energy Star® standards whenever possible, including working with builders who offer guaranteed heating and cooling costs as a component of their new home energy efficiency warranty. At this time, APS is still awaiting ACC approval for the expanded and modified residential new construction program.

Program Goals, Objectives and Savings Targets

The rationale for this program is that the pace of residential new construction in the APS service territory, particularly the Phoenix metro area, is one of the biggest drivers of APS' system load growth. It is much easier and more cost-effective to work with builders to implement energy efficiency at the time of construction rather than attempt to retrofit efficiency after a home has been built. For many new home measures such as building envelope improvements, the benefits of energy efficiency upgrades will be sustained for the life of the home to produce very cost-effective savings. The program objective is to increase the penetration of homes built to high efficiency standards.

The current program is a market transformation effort with long term goals to improve the market for energy-efficient new homes by reducing market barriers to adoption of greater efficiency levels. The proposed program modification filed on July 1, 2005 includes revised program objectives and estimated savings.

Programs Terminated

No programs were terminated during the second half of 2005.

Levels of Participation

- In the second half of 2005, APS signed up 899 new homes to be built to program standards.

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- There are currently 10 Arizona homebuilders and 72 subdivisions participating in the program.
- APS distributed over 1,000 Homebuyer's Guides to Energy Efficiency to provide consumer education about energy efficiency features to consider when shopping for a new home.
- In the second half of 2005, APS conducted more than a week of Building Science training for members of the homebuilding industry. In September, APS partnered with the Homebuilder's Association (HBA) to offer two training sessions in conjunction with the HBA's annual conference and trade show. Over 80 builders attended the two sessions. In November, APS sponsored a full week of Building Science training, including a general session in Phoenix that was attended by over 200 builders and subcontractors and a general session in the Prescott area attended by over 100 northern and central Arizona building industry professionals. In addition, the week of training included intensive one-day sessions with Pulte/Del Webb, Shea Homes, Beazer Homes, and a session for architects and residential designers held at the American Institute of Architects (AIA) offices in Phoenix. APS partnered with the Arizona Energy Office to sponsor all of the November training sessions.

Evaluation and Monitoring Activities and Results

Program standards require independent performance testing with a minimum of 15% of all homes randomly tested and inspected to ensure that performance is achieved in the field.

In the first half of 2005, APS filed for approval to proceed with a DSM baseline and market potential study. The study was approved by the ACC, Decision No. 67816. As part of this research, the study will document the current state of the market for residential new construction, including the level of energy efficiency awareness among builders and homebuyers, typical efficiency levels, and current installation practices. This research is currently underway. Final results are anticipated by the end of the first quarter of 2006.

kW and kWh Savings

As part of the current market transformation effort, kW and kWh savings are not quantified. The program plan that APS filed on July 1, 2005 includes estimated savings for the proposed program.

Benefits and Net Benefits/Performance Incentive Calculation

As part of the current market transformation effort, program benefits and net benefits are not currently quantified and performance incentives are not calculated. The program plan that APS filed on July 1, 2005 includes estimates of program benefits/net benefits and calculates estimated program performance incentives.

Problems Encountered and Proposed Solutions

The Phoenix Metro region is currently the number one new housing market in the country. In the face of tremendous buyer demand and intense building activity it is difficult to encourage builders to make changes in construction practices. In addition, incremental costs for builders to meet program standards can be significant. To encourage builder participation and help

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cover incremental construction costs, APS proposes that builder incentives should be provided as mentioned above in the program modifications section.

Costs Incurred

Costs incurred for this program during the second half of 2005 are listed below:

ACC Program	Rebates & Incentives	Training & Technical Assistance	Consumer Education	Program Implement	Program Marketing	Planning & Admin	Program Total Cost
Res New Construction	\$4,538	\$41,299	\$3,568	\$17,089	\$46,251	\$20,267	\$133,012

Findings from all Research Projects

APS participated in an EPA/DOE sponsored study of Phoenix area new homes that was completed in July 2005. APS was a partner in this study of over seven thousand local homes which compared the actual energy performance of standard built and energy efficient homes. Results of this study indicate that APS Performance Built Homes used an average of 2.80 kWh/ft² compared to an average of 4.16 kWh/ft² for standard construction.

Other Significant Information

No other significant information to report.

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DSM SEMI-ANNUAL PROGRESS REPORT FOR THE PERIOD: JULY THROUGH DECEMBER 2005

PROGRAM: CONSUMER PRODUCTS PROGRAM

Description

This program promotes high-efficiency EPA/DOE Energy Star® compact fluorescent lamps (CFL's). CFL's use an average of 75% less energy than standard incandescent bulbs and last up to ten times longer, typically saving consumers more than \$25 in energy costs over the life of each bulb. The program offers discounts on CFL's at local retail locations through cooperative agreements with retailers and lighting manufacturers. This provides consumers with reduced retail prices for CFL's at local lighting retailers, with prices below \$.99 per bulb.

Program Modifications

There are no program modifications to report at this time.

Program Goals, Objectives and Savings Targets

The program goals, objectives, and savings targets are identified in the Consumer Products program plan. According to the Staff Recommended Order issued on July 25, 2005, the lighting portion of the Consumer Products program "would result in about \$20.8 million net benefits to society" over the lifetime of the measures installed thru the current program planning period (2005-2007).

Programs Terminated

No programs were terminated during the second half of 2005.

Levels of Participation

The program was kicked-off to consumers on October 5, 2005. From October through the end of December 2005, the program resulted in sales of 362,320 CFL's. Due to the short time available to plan and kick-off the program to consumers, the 2005 effort focused on three major retail outlets; Home Depot, Lowe's, and Costco. These retail stores throughout the APS territory featured the discounted CFL's, providing opportunities for broad customer participation outside the Phoenix metro area.

Evaluation and Monitoring Activities and Results

In the first half of 2005, APS filed for approval to proceed with a DSM baseline and market potential study. The study was approved by the ACC, Decision No. 67816. As part of this research, the study will document the current state of the market for energy-efficient lighting products, including the level of energy efficiency awareness among consumers and retailers, and the amount of shelf space devoted to energy-efficient products. Findings from this research will be available at the end of the first quarter 2006.

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kW and kWh Savings

Units	Wattage	Watts Saved	Rated Life (hrs)	Est. Measure Life (yrs)	kWh Savings per Year	Lifetime kWh Savings	kW Demand Savings
124,368	13	47	6,000	5.5	6,400,599	35,071,776	994
149,868	14	46	6,000	5.5	7,548,851	41,363,568	1,172
8,188	14	51	6,000	5.5	457,259	2,505,528	71
10,564	15	50	6,000	5.5	578,379	3,169,200	90
3,674	15	45	6,000	5.5	181,036	995,700	28
24,916	18	57	6,000	5.5	1,555,132	8,521,272	241
3,861	20	55	6,000	5.5	232,529	1,274,130	36
36,881	23	67	6,000	5.5	2,705,775	14,826,162	420
362,320					19,659,560	107,727,336	
Indirect cooling energy savings				5 kWh/bulb/yr	1,811,600		

Benefits and Net Benefits/Performance Incentive Calculation

The benefits and net benefits are provided in Table 2. The details for the performance Incentive calculation are provided in Table 3.

Problems Encountered and Proposed Solutions

No problems were encountered during this reporting period.

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Costs Incurred

Costs incurred for this program during the second half of 2005 are listed below:

ACC Program	Rebates & Incentives	Training & Technical Assistance	Consumer Education	Program Implement	Program Marketing	Planning & Admin	Program Total Cost
Consumer Products	\$399,864	-	\$4,979	\$289,559	\$43,425	\$41,548	\$779,375

Findings from all Research Projects

No research projects were undertaken.

Other Significant Information

No other significant information to report.

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DSM SEMI-ANNUAL PROGRESS REPORT FOR THE PERIOD: JULY THROUGH DECEMBER 2005

PROGRAM: NON-RESIDENTIAL PROGRAM FOR EXISTING FACILITIES

Description

This proposed program was filed for approval on July 1, 2005. The proposed program provides prescriptive incentives for owners and operators of large non-residential facilities for energy efficiency improvements in lighting, HVAC (heating, ventilation, and air conditioning), motors, and refrigeration applications. The program also provide subsidies for covering the cost of a retro-commissioning study that uses a systematic process to improve and optimize an existing building's operations and to support those improvements with enhanced documentation and training. The program provides educational and promotional pieces designed to assist facility and business owners and operators in making decisions to improve the energy efficiency of their facilities and promotes contractors that have gone through commercial qualified contractor training and meet APS' standards for installation and operation of high efficiency systems. For DSM applications not covered through the prescriptive incentives, the program provides custom efficiency incentives to implement energy efficiency measures that are evaluated on a case-by-case basis.

Program Modifications

Not applicable. This program had not yet been approved.

Program Goals, Objectives and Savings Targets

The proposed program filed on July 1, 2005 includes program objectives and estimated savings.

Programs Terminated

No programs were terminated during the second half of 2005.

Levels of Participation

Not applicable. This program had not yet been approved.

Evaluation and Monitoring Activities and Results

In the first half of 2005, APS filed for approval to proceed with a DSM baseline and market potential study. The study was approved by the Decision No. 67816. As part of this research, the study will document the current state of the market for energy efficiency in existing non-residential facilities and the potential for energy efficiency improvements in this customer segment.

kW and kWh Savings

Not applicable. This program had not yet been approved.

Benefits and Net Benefits/Performance Incentive Calculation

The program plan that APS filed on July 1, 2005 includes estimates of program benefits/net benefits and calculates estimated program performance incentives. This program had not yet been approved, so no benefits have been achieved at this point.

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DSM SEMI-ANNUAL PROGRESS REPORT FOR THE PERIOD: JULY THROUGH DECEMBER 2005

Problems Encountered and Proposed Solutions

No problems were encountered during this reporting period.

Costs Incurred

Costs incurred for this program during the second half of 2005 are listed below:

ACC Program	Rebates & Incentives	Training & Technical Assistance	Consumer Education	Program Implement	Program Marketing	Planning & Admin	Program Total Cost
Large Non Res Existing	-	-	-	-	-	\$75,534	\$75,534

Findings from all Research Projects

No research projects were undertaken.

Other Significant Information

APS, with Collaborative review and input, issued a Request for Proposal (RFP) for our Implementation Contractor (IC) for the Small Non-Residential, Non-Residential Existing Facilities and New Construction & Major Renovation Programs on August 2, 2005. Bidder responses to the RFP were due on September 2, 2005, and APS held interviews with the top two candidates on October 20th and October 24th, of 2005. APS intends to finalize negotiations with the top RFP candidate and select them as our IC upon ACC approval of these three Non-Residential Programs.

ARIZONA PUBLIC SERVICE COMPANY

DSM SEMI-ANNUAL PROGRESS REPORT FOR THE PERIOD: JULY THROUGH DECEMBER 2005

PROGRAM: NON-RESIDENTIAL NEW CONSTRUCTION AND MAJOR RENOVATIONS

Description

This proposed program includes three components: design assistance, custom efficiency, and prescriptive measures. Design assistance involves efforts to integrate energy-efficiency into a customer's design process to influence equipment/systems selection and specification as early in the design process as possible. Custom efficiency provides the opportunity to implement energy-efficiency measures not covered by prescriptive incentives for large non-residential customers and provides for feasibility studies to assess the savings from complex applications.

Program Modifications

Not applicable. This program had not yet been approved.

Program Goals, Objectives and Savings Targets

The proposed program filed on July 1, 2005 includes program objectives and estimated savings.

Programs Terminated

No programs were terminated during the second half of 2005.

Levels of Participation

Not applicable. This program had not yet been approved.

Evaluation and Monitoring Activities and Results

In the first half of 2005, APS filed for approval to proceed with a DSM baseline and market potential study. The study was approved by the ACC, Decision No. 67816. As part of this research, the study will document the current state of the market for energy efficiency in new non-residential construction projects and major renovations and the potential for energy efficiency improvements in this segment.

kW and kWh Savings

Not applicable. This program had not yet been approved.

Benefits and Net Benefits/Performance Incentive Calculation

The program plan that APS filed on July 1, 2005 includes estimates of program benefits/net benefits and calculates estimated program performance incentives. This program has not yet been approved, so no benefits have been achieved at this point.

Problems Encountered and Proposed Solutions

No problems were encountered during this reporting period.

ARIZONA PUBLIC SERVICE COMPANY

DSM SEMI-ANNUAL PROGRESS REPORT FOR THE PERIOD: JULY THROUGH DECEMBER 2005

Costs Incurred

Costs incurred for this program during the second half of 2005 are listed below:

ACC Program	Rebates & Incentives	Training & Technical Assistance	Consumer Education	Program Implement	Program Marketing	Planning & Admin	Program Total Cost
Large Non Res New Const	-	-	-	-	-	\$86,117	\$86,117

Findings from all Research Projects

No research projects were undertaken.

Other Significant Information

APS, with Collaborative review and input, issued a Request for Proposal (RFP) for our Implementation Contractor (IC) for the Small Non-Residential, Non-Residential Existing Facilities and New Construction & Major Renovation Programs on August 2, 2005. Bidder responses to the RFP were due on September 2, 2005, and APS held interviews with the top two candidates on October 20th and October 24th, of 2005. APS intends to finalize negotiations with the top RFP candidate and select them as our IC upon ACC approval of these three Non-Residential Programs.

ARIZONA PUBLIC SERVICE COMPANY

DSM SEMI-ANNUAL PROGRESS REPORT FOR THE PERIOD: JULY THROUGH DECEMBER 2005

PROGRAM: SMALL NON-RESIDENTIAL DSM PROGRAM

Description

This program was filed for approval on July 1, 2005. The proposed program provides prescriptive incentives for small non-residential customers for energy-efficiency improvements in lighting, HVAC ("heating, ventilation, and air conditioning"), motors, and refrigeration applications through a simple and straightforward mechanism for program participation. To support this approach, the program provides a "one source" audit and installation resource for small non-residential customers through a network of trained qualified contractors that meet rigorous program requirements. The program promotes a "systems approach" to improve the efficiency of small commercial HVAC systems. This will be accomplished by promoting proper sizing of new packaged air conditioning equipment, staged air conditioning equipment, and systems diagnostics and improvements that include air balancing, proper refrigerant charging, and duct leakage sealing. In addition, the program provides educational and promotional materials designed to assist building owners and operators in making decisions to improve the energy-efficiency of their facilities.

Program Modifications

Not applicable. This program had not yet been approved.

Program Goals, Objectives and Savings Targets

The proposed program filed on July 1, 2005 includes program objectives and estimated savings.

Programs Terminated

No programs were terminated during the second half of 2005.

Levels of Participation

Not applicable. This program had not yet been approved.

Evaluation and Monitoring Activities and Results

In the first half of 2005, APS filed for approval to proceed with a DSM baseline and market potential study. The study was approved by the ACC, Decision No. 67816. As part of this research, the study will document the current state of the market for energy efficiency in existing small non-residential facilities and the potential for energy efficiency improvements in this customer segment.

kW and kWh Savings

Not applicable. This program had not yet been approved.

Benefits and Net Benefits/Performance Incentive Calculation

The program plan that APS filed on July 1, 2005 includes estimates of program benefits/net benefits and calculates estimated program performance incentives. This program had not yet been approved, so no benefits have been achieved at this point.

Problems Encountered and Proposed Solutions

No problems were encountered during this reporting period.

ARIZONA PUBLIC SERVICE COMPANY

DSM SEMI-ANNUAL PROGRESS REPORT FOR THE PERIOD: JULY THROUGH DECEMBER 2005

Costs Incurred

Costs incurred for this program during the second half of 2005 are listed below:

ACC Program	Rebates & Incentives	Training & Technical Assistance	Consumer Education	Program Implement	Program Marketing	Planning & Admin	Program Total Cost
Small Business	-	-	-	-	-	\$39,539	\$39,539

Findings from all Research Projects

No research projects were undertaken.

Other Significant Information

APS, with Collaborative review and input, issued a Request for Proposal (RFP) for our Implementation Contractor (IC) for the Small Non-Residential, Non-Residential Existing Facilities and New Construction & Major Renovation Programs on August 2, 2005. Bidder responses to the RFP were due on September 2, 2005, and APS held interviews with the top two candidates on October 20th and October 24th, of 2005. APS intends to finalize negotiations with the top RFP candidate and select them as our IC upon ACC approval of these three Non-Residential Programs.

ARIZONA PUBLIC SERVICE COMPANY

DSM SEMI-ANNUAL PROGRESS REPORT FOR THE PERIOD: JULY THROUGH DECEMBER 2005

PROGRAM: BUILDING OPERATOR TRAINING PROGRAM

Description

This program was filed for approval on July 1, 2005. The program provides subsidized training for building operators (managers) and facility maintenance technicians on energy-efficient building operating and maintenance practices.

Program training will be provided through a cooperative effort with the Electric League of Arizona ("ELA") in support of their "Institute for Facility Management Education" program, which includes industry expert training targeted to reach facility managers and building operators of medium to large commercial and industrial facilities. The ELA issues a certificate of completion for participants that successfully complete Facility Maintenance Technician Training and Building Operator training.

Program Modifications

Not applicable. This program had not yet been approved.

Program Goals, Objectives and Savings Targets

The proposed program filed on July 1, 2005 includes program objectives and estimated savings.

Programs Terminated

Not applicable. This program had not yet been approved.

Levels of Participation

Not applicable. This program had not yet been approved.

Evaluation and Monitoring Activities and Results

In the first half of 2005, APS filed for approval to proceed with a DSM baseline and market potential study. The study was approved by the ACC, Decision No. 67816. As part of this research, the study will document the current state of the market for energy efficiency in existing non-residential facilities, the current awareness levels of energy efficiency among building operators and the potential for energy efficiency improvements in this customer segment.

kW and kWh Savings

Not applicable. This program had not yet been approved.

Benefits and Net Benefits/Performance Incentive Calculation

The program plan that APS filed on July 1, 2005 includes estimates of program benefits/net benefits and calculates estimated program performance incentives. This program had not yet been approved, so no benefits have been achieved at this point.

Problems Encountered and Proposed Solutions

No problems were encountered during this reporting period.

ARIZONA PUBLIC SERVICE COMPANY

DSM SEMI-ANNUAL PROGRESS REPORT FOR THE PERIOD: JULY THROUGH DECEMBER 2005

Costs Incurred

No costs were incurred for this program during the second half of 2005.

Findings from all Research Projects

No research projects were undertaken.

Other Significant Information

No other significant information to report.

ARIZONA PUBLIC SERVICE COMPANY

DSM SEMI-ANNUAL PROGRESS REPORT FOR THE PERIOD: JULY THROUGH DECEMBER 2005

PROGRAM: ENERGY INFORMATION SERVICES (EIS) PROGRAM

Description

This program was filed for approval on July 1, 2005. The proposed program will provide monthly energy use information to large non-residential customers through an automated service maintained by a third party energy management information systems provider. The program provides the energy information service at a reduced fee to large commercial, industrial and institutional customers. At a minimum, the customer will receive monthly usage and demand reports that could be utilized to improve or monitor energy usage patterns, reduce energy use, reduce demands during on-peak periods and better manage their overall energy operations.

Program Modifications

Not applicable. This program had not yet been approved.

Program Goals, Objectives and Savings Targets

The proposed program filed on July 1, 2005 includes program objectives and estimated savings.

Programs Terminated

No programs were terminated during the second half of 2005.

Levels of Participation

Not applicable. This program had not yet been approved.

Evaluation and Monitoring Activities and Results

In the first half of 2005, APS filed for approval to proceed with a DSM baseline and market potential study. The study was approved by the ACC, Decision No. 67816. As part of this research, the study will document the current state of the market for energy efficiency in existing non-residential facilities, the current awareness levels of energy efficiency among building operators and the potential for energy efficiency improvements in this customer segment.

kW and kWh Savings

Not applicable. This program had not yet been approved.

Benefits and Net Benefits/Performance Incentive Calculation

The program plan that APS filed on July 1, 2005 includes estimates of program benefits/net benefits and calculates estimated program performance incentives. This program had not yet been approved, so no benefits have been achieved at this point.

Problems Encountered and Proposed Solutions

No problems were encountered during this reporting period.

ARIZONA PUBLIC SERVICE COMPANY

DSM SEMI-ANNUAL PROGRESS REPORT FOR THE PERIOD: JULY THROUGH DECEMBER 2005

Costs Incurred

No costs were incurred for this program during the second half of 2005.

Findings from all Research Projects

No research projects were undertaken.

Other Significant Information

APS has drafted a Request For Proposal (RFP), for an EIS Implementation Contractor (IC). The EIS RFP is being reviewed internally and will be distributed to Collaborative members for review and input prior to issuance.

ARIZONA PUBLIC SERVICE COMPANY

DSM SEMI-ANNUAL PROGRESS REPORT FOR THE PERIOD: JULY THROUGH DECEMBER 2005

PROGRAM: SCHOOLS PROGRAM

Description

This program was filed for approval on July 1, 2005. The proposed program provides assistance in reducing the energy used in public school buildings, including charter schools. The incentives that will be paid to schools for DSM measures are the same as for the non-school non-residential DSM programs.

Program Modifications

Not applicable. This program had not yet been approved.

Program Goals, Objectives and Savings Targets

The proposed program filed on July 1, 2005 includes program objectives and estimated savings.

Programs Terminated

No programs were terminated during the second half of 2005

Levels of Participation

Not applicable. This program had not yet been approved.

Evaluation and Monitoring Activities and Results

In the first half of 2005, APS filed for approval to proceed with a DSM baseline and market potential study. The study was approved by the ACC, Decision No. 67816. As part of this research, the study will document the current state of the market for energy efficiency in school facilities and the potential for energy efficiency improvements in this customer segment.

kW and kWh Savings

Not applicable. This program had not yet been approved.

Benefits and Net Benefits/Performance Incentive Calculation

The program plan that APS filed on July 1, 2005 includes estimates of program benefits/net benefits and calculates estimated program performance incentives. This program had not yet been approved, so no benefits have been achieved at this point.

Problems Encountered and Proposed Solutions

No problems were encountered during this reporting period.

Costs Incurred

Costs incurred for this program during the second half of 2005 are listed below:

ACC Program	Rebates & Incentives	Training & Technical Assistance	Consumer Education	Program Implement	Program Marketing	Planning & Admin	Program Total Cost
Schools	-	-	-	-	-	\$21,718	\$21,718

ARIZONA PUBLIC SERVICE COMPANY

DSM SEMI-ANNUAL PROGRESS REPORT FOR THE PERIOD: JULY THROUGH DECEMBER 2005

Findings from all Research Projects

No research projects were undertaken.

Other Significant Information

No other significant information to report.

ARIZONA PUBLIC SERVICE COMPANY

DSM SEMI-ANNUAL PROGRESS REPORT FOR THE PERIOD: JULY THROUGH DECEMBER 2005

PORTFOLIO PLANNING: DSM MEASUREMENT, EVALUATION AND RESEARCH

Description

In Decision No.67816, the ACC pre-approved the expenditure of up to \$500,000 of DSM funds for a market assessment study, which will provide reliable information on the market potential, kW and kWh savings potential and costs associated with energy-efficiency technologies. Specifically, the DSM study will assess the potential for improving the market penetration of energy-efficient technologies and practices in residential and non-residential customer segments. The study information will be used to confirm program design assumptions and to target programs to maximize cost effectiveness.

In the DSM Program Portfolio Plan filed on July 1, 2005, APS proposes up to \$1.3 million per year to conduct measurement, evaluation and research of DSM programs. For the reporting period, this research includes preparation of the Baseline Study pre-approval and RFP, DSM collaborative group meetings and public comment meetings to assist in development of the DSM portfolio.

Program Modifications

Not applicable.

Program Goals, Objectives and Savings Targets

Not applicable.

Programs Terminated

Not applicable.

Levels of Participation

Not applicable.

Evaluation and Monitoring Activities and Results

The Baseline and Market Potential Study currently being conducted by ICF Consulting was 40% complete at 12/31/05 and is estimated to be completed by the end of first quarter, 2006.

kW and kWh Savings

Not applicable.

Benefits and net benefits, both in dollars, as well as performance incentive calculation

Not applicable.

Problems Encountered and Proposed Solutions

Not applicable.

Costs Incurred

Total costs incurred for MER during this reporting period were \$222,008. These costs were comprised of \$195,892 for the Baseline and Market Potential Study and \$26,116 for the balance of MER activities.

ARIZONA PUBLIC SERVICE COMPANY

DSM SEMI-ANNUAL PROGRESS REPORT FOR THE PERIOD: JULY THROUGH DECEMBER 2005

Findings from all Research Projects

Study has not been completed.

Other Significant Information

In September 2005, APS drafted a Request For Proposal (RFP) for a MER contractor. This draft RFP was circulated for Collaborative member review and input. APS anticipates issuance of the MER RFP during the 1st half of 2006.

ARIZONA PUBLIC SERVICE COMPANY

DSM SEMI-ANNUAL PROGRESS REPORT FOR THE PERIOD: JULY THROUGH DECEMBER 2005

Table 4
DSM Program Expenses: January – December 2005

ACC Program	Rebates & Incentives	Training & Technical Assistance	Consumer Education	Program Implement	Program Marketing	Planning & Admin	*Program Total Cost
Residential							
Low Income	\$389,600	\$10,000	\$3,220	\$48,154	-	\$95,260	\$546,234
Res Existing HVAC	-	\$36,656	\$94,646	\$179,745	\$151,793	\$62,046	\$524,886
Res New Const	\$20,304	\$41,299	\$79,561	\$17,219	\$106,475	\$78,230	\$343,088
Consumer Products	\$399,864	-	\$4,979	\$289,559	\$43,425	\$70,701	\$808,528
Totals for Residential	\$809,768	\$87,955	\$182,406	\$534,677	\$301,693	\$306,237	\$2,222,736
Non-Residential							
Large Non Res Existing	-	-	-	-	-	\$114,108	\$114,108
Large Non Res New Const	-	-	-	-	-	\$128,316	\$128,316
Small Business	-	-	-	-	-	\$65,293	\$65,293
Bldg Operator Training	-	-	-	-	-	\$5,824	\$5,824
Energy Information Svcs	-	-	-	-	-	\$5,878	\$5,878
Schools	-	-	-	-	-	\$36,853	\$36,853
Total for Non-Residential	-	-	-	-	-	\$356,272	\$356,272
Segment Totals	\$809,768	\$87,955	\$182,406	\$534,677	\$301,693	\$662,509	\$2,579,008
				Program Costs			\$2,579,008
				Meas, Eval, & Research			\$236,966
				Performance Incentive			\$394,806

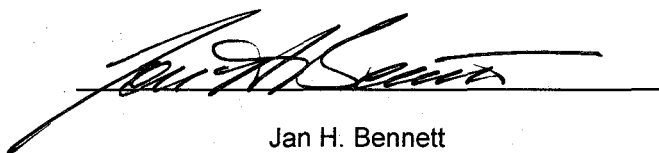
ARIZONA PUBLIC SERVICE COMPANY

**DSM SEMI-ANNUAL PROGRESS REPORT FOR THE PERIOD:
JULY THROUGH DECEMBER 2005**

**CERTIFICATION BY APS
OF
DSM SEMI-ANNUAL PROGRESS REPORT
FOR THE PERIOD:
JULY THROUGH DECEMBER 2005**

Pursuant to Decision No. 67744 (April 7, 2005), I certify that to the best of my knowledge and based on the information made available to me, the DSM Semi-Annual report is complete and accurate in all material respects.

Date:

A handwritten signature in black ink, appearing to read "Jan H. Bennett", is written over a horizontal line.

Jan H. Bennett
Vice-President of Customer Service